

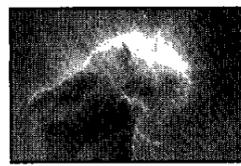


National Aeronautics and Space Administration  
Lyndon B. Johnson Space Center  
Houston, Texas



### Safety awareness

Employees participate in Safety Awareness Day at Ellington Field. Story on Page 3.



### Star birth

The Hubble Space Telescope captures dramatic photos of star births. Story on Page 4.

# Space News Roundup

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## Columbia returns to Earth with wealth of scientific data

By Karen Schmidt

The second longest shuttle flight to date touched down at Kennedy Space Center on Sunday, with a hoard of data tucked away in the United States Microgravity Laboratory.

Columbia and its seven-member crew touched down at 5:45 a.m. CST after completing nearly 16 days of microgravity experiments in space.

STS-73 Commander Ken Bowersox, Pilot Kent Rominger, Mission Specialists Kathy Thornton, Cady Coleman, and Mike Lopez-Alegria, and Payload Specialists Al Sacco and Fred Leslie, returned to Ellington Field late Sunday afternoon. The Blue Team—Coleman, Lopez-Alegria and Leslie—opted not to participate in crew return ceremonies since



they had not slept for 24 hours. The Red Team—Bowersox, Rominger, Thornton and Sacco—did take a few moments to reflect on their 16 days in orbit.

"We had great success on this mission," Bowersox said. "It's not just due to us, it's due to a lot of preflight work by a lot of people. We had five rookies on this flight and I was a little nervous. But when they got in orbit they performed like veterans. They worked hard and didn't complain. I hope I get the chance to fly with them again."

Thornton was excited about the science data collected. "Everything worked flawlessly when we were up there and it made our job really easy," Thornton said. "We had a lot Please see **CREW**, Page 4



JSC Photo by Mark Sowa

JSC Acting Director George Abbey, left, welcomes home the STS-73 crew at Ellington field Sunday. The crew from left are, Al Sacco, Kathy Thornton, Ken Bowersox and Kent Rominger.

## Atlantis to launch Saturday

With Columbia gliding into home last Sunday, Atlantis now takes center stage with a launch on STS-74, the second shuttle-Mir docking flight, at 6:56 a.m. CST Saturday.

All preparations at Launch Pad 39A for Atlantis' launch tomorrow were on schedule as of mid-week, with the countdown clock starting at 6 a.m. CST Wednesday. The crew—Commander Ken Cameron, Pilot Jim Halsell and Mission Specialists Chris Hadfield, Jerry Ross and Bill McArthur—arrived at KSC Wednesday in preparation for the launch. The launch window for tomorrow is seven minutes long.

Atlantis' flight will be the second of seven planned Mir dockings for the shuttle, and Atlantis' primary cargo is the Russian-built Docking Module. The 15-foot long, tunnel-like module will be left permanently attached to Mir to provide better clearance of Mir's solar arrays for future shuttle dockings, allowing Mir to avoid having to change its orientation for each mission. With an on-time launch, Atlantis is targeted to dock with Mir at 1:20 a.m. CST Tuesday. The day before, the module will be lifted from the cargo bay using Atlantis' mechanical arm and attached to the shuttle's docking mechanism.

In addition, Atlantis is carrying various supplies for the Mir, including two replacement solar arrays attached to the docking module for the trip to orbit, and a variety of experiments will be returned from the station via the shuttle.

Please see **STS-74**, Page 4



NASA Photo

The STS-74 crew conducts a Terminal Countdown Demonstration Test on Atlantis at Kennedy Space Center. The orbiter and its five crew members are expected to liftoff Saturday for the second docking with the Russian Mir Space Station. From left are, Mission Specialist Chris Hadfield, Pilot Jim Halsell, Commander Ken Cameron and Mission Specialist Bill McArthur. Kneeling in front is Mission Specialist Jerry Ross.

## NASA to sole source shuttle prime contract

NASA will pursue a non-competitive contract with United Space Alliance to eventually assume responsibility for space shuttle operations.

"This clearly is the appropriate path to take," said NASA Administrator Daniel S. Goldin. "It will allow us to ensure the safe operations of the space shuttle, meet the flight manifest and maintain our commitment to launch the first space station element in late 1997. I am committed to working with Congress to maximize the future commercial potential of the station and make the best use of the American taxpayer's dollar."

Rockwell International and Lockheed Martin Corporation, which together hold 69 percent of the dollar value of all shuttle related prime contracts, will form a joint venture, "United Space Alliance," to become the Space Flight Operations contractor.

Goldin said reaching a contract with U.S. Alliance depends on three factors. First, the two companies must form a viable, separate legal entity (U.S. Alliance) capable of operating the shuttle program. Second, NASA and U.S. Alliance must negotiate a contractual arrangement that commits the contractor and provides appropriate incentives to maintain safety, meet the flight manifest and achieve program efficiencies. And third, the workforce which U.S.

Alliance applies to the space flight operations contract must possess sufficient experience with shuttle operations that additional time-consuming training is unnecessary to keep the program progressing safely and efficiently.

"With Lockheed Martin and Rockwell, we have two experienced companies that clearly understand how to operate the shuttle safely," Goldin said. "There's no new contractor or workforce to train, and because the two companies already have nearly 70 percent of the dollar value of all shuttle-related prime contracts, the task of combining the existing separate contracts under the consolidated shuttle contract will be greatly simplified."

Goldin said the Source Evaluation Board, which has been evaluating expressions of interest from companies in becoming the space flight operations contractor, concluded that a non-competitive contract with U.S. Alliance was clearly in the public interest. "There was no other company that could possibly meet our safety, manifest and schedule requirements," Goldin said. "Under all the circumstances, the advantages of contracting directly with U.S. Alliance outweigh any benefits from competition."

Goldin described the next steps which could lead to award of a non-competitive contract. Please see **GOLDIN**, Page 4

## Travel office streamlines services for travelers

The JSC Financial Management Division Travel Office is undergoing several significant process changes designed to improve services to travelers and to streamline operations.

These improvements include providing travelers the option of using a government issued charge card to withdraw travel advances, payment of travel advances and reimbursements by electronic funds transfer, or EFT, and a Travel Funding Office Call Processing Box.

At the forefront of the new services provided by the Travel Office is the use of the American Express charge card for withdrawal of travel advances. Travelers will be provided the convenience of withdrawing their advance at most ATM's nationwide at any time of the day.

Travelers will continue to have the option to interface with the cashier to obtain cash advances.

"Use of the American Express charge card provides the ultimate flexibility for withdrawal of cash advances," said Wayne Draper, JSC's Chief Financial Officer. "A traveler can decide when and where to withdraw the funds, and it prevents the traveler from having to carry large amounts of cash throughout the TDY period. If you don't have a card and you're a recurring traveler, we encourage you to sign up." Information will be forthcoming on how to apply.

The Travel Office also is preparing for optional disbursement of travel advances and reimbursements through EFT. In the next few

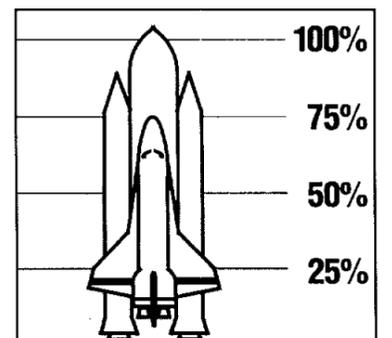
months, the Travel Office will be able to disburse funds by EFT directly to the traveler's bank account. Currently, EFT payments for travel can be processed on a special request basis. Information will be forthcoming on how to sign up.

"Travel payments paid directly to the traveler's bank account will expedite disbursement of funds," said John Beall, chief of the Financial Management Division. "Travelers will no longer be required to make trips to the Travel Office in Bldg. 1 to collect travel funds. In most cases, travelers will receive funds more rapidly than they are currently receiving them."

The Travel Funding Office has implemented a new feature that will help all travelers. A Call Processing

Box is now installed on x30561. This telephone feature is an automated telephone system that is set up with a menu that can transfer a caller to a predetermined extension when a choice is made. The predetermined extensions are forwarded to representatives of either the Travel Services Contractor, Travel Claims Office, Cashier's Office or Travel Funding Office.

"This telephone call processing box feature will help expedite callers to the correct extension," Beall said. "Callers will be able to choose the option that will route their travel related questions without requiring the assistance of Travel Funding Office personnel. We feel that this automated telephone feature will Please see **TRAVEL**, Page 4



1995 GOAL: \$460,000



JSC

## Ticket Window

The following discount tickets are available for purchase in the Bldg. 11 Exchange Store from 10 a.m.-2 p.m. Monday-Thursday and 9 a.m.-3 p.m. Friday. For more information, call x35350 or x30990.

**Dickens on the Strand:** Dec. 2 and 3. Tickets cost \$6.30.

**Houston Aeros Hockey:** Houston Aeros vs. Utah Grizzlies at 7 p.m. Dec. 29 in the Summit. Tickets cost \$12.50.

**Sea World:** Tickets cost \$23.50 for adults and \$16.25 for children 3-11.

**Space Center Houston:** Discount tickets, adult, \$8.75; child (3-11), \$7.10.

**Metro tickets:** Passes, books and single tickets available.

**Movie discounts:** General Cinema, \$4.75; AMC Theater, \$4; Sony Loew's Theater, \$4.75.

**Stamps:** Book of 20, \$6.40.

**Sweetwater Pecans:** \$5.60 per bag.

**JSC history:** *Suddenly, Tomorrow Came: A History of the Johnson Space Center.* Cost is \$11.

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## Gilruth Center News

**Sign up policy:** All classes and athletic activities are first come, first served. Sign up in person at the Gilruth Center and show a NASA badge or yellow EAA dependent badge. Classes tend to fill up two weeks in advance. Payment must be made in full, in exact change or by check, at the time of registration. No registration will be taken by telephone. For more information, call x30304.

**EAA badges:** Dependents and spouses may apply for photo identification badges from 7 a.m.-9 p.m. Monday-Friday; and 8 a.m.-4 p.m. Saturdays. Dependents must be between 16 and 23 years old.

**Winter softball league:** Teams interested in playing call the Gilruth at x33345.

**Aerobics:** Classes meet 5:15-6:15 p.m. Tuesday, Thursday and Friday and 9:30-11 a.m. Saturdays. Cost is \$35 for 11 weeks.

**Women's self defense:** Martial Arts training for women only from 5-6 p.m. Tuesdays and Wednesdays. Cost is \$25 a month.

**Weight safety:** Required course for employees wishing to use the weight room is offered from 8-9:30 p.m. Nov. 14 and Nov. 30. Pre-registration is required. Cost is \$5.

**Exercise:** Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays.

**Aikido:** Martial arts class meets from 5-7 p.m. Wednesday. Cost is \$25 per month. New classes begin the first of each month.

**Ballroom dancing:** Cost is \$60 per couple. For additional information call the Gilruth Center at x33345.

**Country and Western dancing:** Beginner class meets 7-8:30 p.m. Monday. Advance class meets 8:30-10 p.m. Monday. Cost is \$20 per couple.

**Fitness program:** Health Related Fitness Program includes a medical examination screening and a 12-week individually prescribed exercise program. For more information, call Larry Wier at x30301.

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## Dates & Data

### Today

**Veterans Day:** Most JSC offices will be closed in observance of the Veterans Day holiday.

### Monday

**Health plan open season:** The 1995 open season for enrolling in or changing health plans under the Federal Employees Health Benefits Program begins Nov. 13 and continues through Dec. 11. During this open season period, employees may change health plans, add or remove dependent coverage, or enroll for the first time. For additional information, contact Employee Services at x32681.

**Cafeteria menu — Special:** hamburger steak. Total Health: vegetable lasagna. Entrees: beef Burgundy over noodles, barbecue smoked link, vegetable lasagna, steamed fish, French dip sandwich. Soup: chicken and wild rice. Vegetables: buttered corn, steamed spinach, vegetable sticks, navy beans.

### Tuesday

**Blood drive:** McDonnell-Douglas will host a blood drive from 8-11 a.m. at 131000 Space Center Blvd. For additional information call Teresa Esquivel at 244-4285.

**EAA General Assembly meeting:** The Employees Activities Association will hold its next General Assembly meeting at 1:30 p.m. Nov. 14 at the Gilruth Center, Room 206. The November meeting is the election of officers for 1996-1998; vote on the location and date of the 1996 JSC picnic and a drawing for an American Airline ticket for two anywhere in the continental US. For more information call Dorothy Rasco at 33150.

**Photo club meets:** The Bay Area Photo Club will meet at 7:30 p.m. Nov. 14 at the Faith Covenant Church. For more information call Kelly Prendergast at x37655.

**Cafeteria menu — Special:**

turkey and dressing. Total Health: roast turkey. Entrees: barbecue spare ribs, liver and onions, baked chicken, steamed fish French dip sandwich. Soup: black bean and rice. Vegetables: steamed broccoli, California vegetables, breaded squash, savory dressing.

### Wednesday

**TSP open season:** Open season for the Thrift Savings Plan begins Nov. 15 and runs through Jan. 31. Eligible employees may begin contributing, change their contribution amounts, change the allocation of their contributions among the available investment funds, end contributions or waive enrollment. For more information, call x32681.

**Toastmasters meet:** The Space-land Toastmasters will meet at 7 a.m. Nov. 15 at House of Prayer Lutheran Church on Bay Area Blvd. For additional information, contact Elaine Trainor, x31034.

**Health Fair:** The annual Health Fair will be held from 9:30 a.m.-2:30 p.m. Nov. 15 at the Gilruth Center. Plan representatives will be available to discuss plan benefits and options with interested employees. For additional information, contact Employee Services at x32681.

**Astronomy seminar:** The JSC Astronomy Seminar will meet at noon Nov. 15 in Bldg. 31, Rm. 129. Dr. Nadine Barlow will discuss "Hawaii DPS Meeting." For more information, call Al Jackson at 333-7679.

**Cycle club:** The Space City Cycle Club will meet for a 25-mile ride beginning at 6 p.m. Nov. 15 at the University of Houston Clear Lake soccer field. For more information on this ride and weekend rides call Mike Prendergast at x45164.

**Thanksgiving lunch:** The cafeteria will host a lunch special from 11 a.m.-2 p.m. in Bldg. 3 and 11 a.m.-1 p.m. in Bldg. 11, Nov. 15. Dinner will include ambrosia salad, turkey and

dressing, giblet gravy, cranberry sauce, Italian green beans almondine, candied yams, roll and butter. Cost is \$3.30.

### Thursday

**AIAA meets:** The American Institute of Aeronautics and Astronautics will meet at 5:30 p.m. Nov. 16 at the Gilruth Center. John "Mike" Lounge will discuss "Commercial Space Activities." Dinner cost \$10 for members and \$11 for non members. Reservations deadline is Nov. 13. For more information call Tanya Bryant at x31175 or Misty Armstrong at 333-4419.

**NMA meets:** The JSC Chapter of the National Management Association will meet at 5 p.m. Nov. 16 at the Gilruth Center. Ken Cox will discuss "Strategic Thinking for Space—An Unfolding Story." Reservations must be made no later than 9 a.m. Nov. 13. Cost is \$10. For more information call Kathleen Kaminski at x38706.

**Cafeteria menu — Special:** smothered steak. Total Health: steamed pollock. Entrees: chicken and dumplings, corned beef and cabbage, broccoli cheese quiche, steamed fish, French dip sandwich. Soup: navy bean soup. Vegetables: steamed cabbage, cauliflower au gratin, buttered carrots, lima beans.

### Friday

**Cafeteria menu — Special:** baked meatloaf. Total Health: baked potato. Entrees: chicken fajitas, ham steak, pork and beef eggrolls, steamed fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: stewed tomatoes, seasoned spinach, cut corn, macaroni and cheese.

### Nov. 20

**Toastmasters meet:** The Space-land Toastmasters will meet at 6:30 p.m. Nov. 20 at Mario's Flying Pizza on NASA Road 1. For additional information, contact Elaine Trainor, x31034.

JSC

## Swap Shop

Swap Shop ads are accepted from current and retired NASA civil service employees and on-site contractor employees. Each ad must be submitted on a separate full-sized, revised JSC Form 1452. Deadline is 5 p.m. every Friday, two weeks before the desired date of publication. Ads may be run only once. Send ads to Roundup Swap Shop, Code AP2, or deliver them to the deposite box outside Rm. 181 in Bldg. 2. No phone or fax ads accepted.

### Property

Sale: Alvin, 10 acres, cleared w/new barn 25' x 15', road frontage.532-42377.

Sale: 130 cleared acres, 5 pastures, 15 mi east of Tyler, house, hay & horse barns, all amenities. 488-5058.

Sale: Taylor Lake Estates wooded lot 90' x 135', can finance, \$39.5k obo. Don, x38039 or 333-1751.

Sale: Waterfront lot, Galveston Bay Seabrook, all utility taps, Corps bulkhead permit. Ed Shumilak, x37686 or 334-7985.

Sale: Hilltop Lakes Resort community, wooded lot, 5 lakes, riding stable, landing strip, 0.4 acre. \$2,995. 486-7380.

Sale/Lease: Town house Queens Court II, Nassau Bay, 3-2.5-2, \$895/mo or \$93.3k. Marilyn, 333-1700.

Sale/Trade: League City, Ellis Landing, 4-2-2, w/2 story dutch barn, 12x16, \$97.9k, will take your house or condo in trade. x41929 or 332-3775.

Sale: Clear Lake Forest, 4-2.5-2, glass walled den family room, FPL, w/hi ceiling, formals, new roof & paint/carpet/paper. 326-2307.

Sale: Brick, 3-2-2, .8 acre wooded lot, wood decking, 2 room workhouse in backyard, \$128.k or trade for equal home or condo in Clear Lake area, must have minimum 2 car garage. x32301 or 351-2793.

Sale: Sterling Knoll, house 3-2-2, approximately 1.3k sq ft, pool, FPL, ex cond, \$69.9k. x32264 or 488-5962.

Rent: Galveston condo, furnished, sleeps 6, Seawall Blvd & 61st ST, wknd/wkly/dly rates. Magdi Yassa, 333-4760 or 486-0788.

Rent: Beach house, ocean view, Crystal Beach, Galveston County, sleeps 10, cable, TV, FPL, wknd/wkly. 486-1888.

Rent: Beach front condo Cancun, Mexico, sleeps 4, full bath, kitchenette, dly maid service, available year round, \$300/wk. Katie, x33185.

### Cars & Trucks

'89 Mazda Cab Plus truck: B220 series, red w/charcoal interior, auto, A/C, chrome wheels, AM/FM/cass, sliding back window, bed liner, new battery/tires. \$5.8k. 482-8820.

'88 BMW 325iS, super clean, black w/tan interi-

or, sunroof, PW/PS, AM/FM/cass, 85k mi, garage kept, \$11k obo. 549-7311.

'88 Dodge Grand Caravan LE, V6, power, loaded, dual A/C, 1 owner, very clean, \$5,995 obo. 480-2507.

'88 Mazda 626 LX, loaded, moonroof, 5 spd, white exterior/burgundy interior, ex cond, 99k mi, \$4,750. Jeff, x41947 or 286-6785.

'87 Honda Accord LX, 4 dr, auto, A/C, P/W, cruise, stereo, \$4,950. 488-7771.

'86 Chevy Sprint, 4 dr, 5 spd, AM/FM/cass, A/C, runs great, \$990. Marco, x39593 or 212-1480.

'87 Gran AM SE Turbo, black, power, new engine, 57k mi, \$3.1k. Chuck, 282-3588.

'86 Buick Century, 4 dr, 4 cyl, auto, very good engine, body, interior, A/C, 107k mi, \$1.4k. x31147.

'90 Isuzu Impulse, A/C, AM/FM/cass, 92k mi, 5 spd, \$3.8k. x31443 or 997-8044.

'92 Nissan pick-up, A/C, auto, AM/FM/cass, 94k mi, needs paint, \$4k. x31443 or 997-8044.

'83 Lincoln Town car, very good cond, 99k mi, \$2k. 488-3747.

'65 Mustang, 6 cyl, new auto transmission, runs good, \$3k. Barbara, x36575.

'94 Suburban SLE, teal/silver, front bucket seats, H/D towing package, dual A/C, loaded, ex cond, \$23,395. 482-4704.

'82 Pontiac Bonneville, tan/beige, A/C, P/W, AM/FM/cass, rear win/defrost. Paula, x31468 or 409-938-0853.

'72 Ford F100 240, 6 cyl, .5 ton stepside, blue, like new, \$4k. 996-5006.

'85 Nissan Sentra Se, A/C, auto, silver/black, sunroof, \$1.7k obo. 244-1859.

'85 Mercury Grand Marquis, ex shape, maroon w/white top, \$2.5 obo. 282-4260 or 996-9646.

'90 Ford F150 Supercab, SWB, auto, PL/PW, tilt, cruise, 85k mi, \$8.5k. x36911 or 326-4662.

'90 Mitsubishi Mirage, good cond, 3 dr hatchback, 5 spd, 4 cyl, a/c, AM/FM/cass, \$5k. Julio, x30090 or 409-935-1691.

### Cycles

'89 Honda XL600V Transalp, garage kept, very clean, \$2,150 firm. Bob, 992-0938.

'86 Honda Magna 700cc, low mi, ex cond, \$2.5k. 488-6526.

### Boats & Planes

'87 Beneteau sailing sloop, 24' equipped for racing, 2 jibs, 2 spin, Johnson 9.9HP, VHF radio, depth, auto til, Loran, head, sleeps 4, \$14k. Ken, x31496 or 286-7583.

Sovereign, 24', ready to sail, main, jib, 125% genoa, depth sounder, head, stove, electric start Johnson OB, \$5.7k. Mike, 282-2787 or 286-1691.

'94 Sea Rayder Jet boat, 13.5', new 90HP Mercruiser motor, extra, \$7,750. 486-3954.

### Audiovisual & Computers

Pentium 75 & 100, full warranty, \$1,699/\$1,899; 386 w/color monitor, \$365; 286 w/color monitor, \$195. Don, x38039 or 333-1751.

Mac SE computer, \$395. 488-7771.

Citizen printer "CSX-140" w/GSX color option, \$199. Magdi Yassa, 333-4760 or 486-0788.

Pioneer #PD-4550-8FS CD player, single disk, w/remote, good cond, \$80 obo. Lisa, x40213 or 554-4140.

Panasonic compact disc player SL-PJ316 4 DAC-MASH, no book, new \$250 sale \$100. x38601.

Fender guitar amp, M-80 chorus, clean/ovd channels, 2 12' speakers, ex cond, \$475. Darrell, 998-9020.

### Photography

Ikelite underwater camera & strobe, \$100 obo. Bill, x47311 or 326-2326.

### Pets & Livestock

Kittens, exotic hybrid, pedigree Bengal cat & Siamese cross, M/F, \$50-\$100. Lynn, x35974 or 992-1052.

### Lost & Found

Lost umbrella somewhere, red & white w/ "Western" name printed, light colored wood grip. Jim, x48531.

### Household

Small color TV by Sharp, 9" screen, \$45; Hoover upright vacuum cleaner, ex cond, \$50. 486-8266.

Black sleeper sofa, queen, w/matching love seat, ex cond, \$800 both; matching framed prints 3 for \$100/set; victorian rose-on-white vine pattern wall paper, retail \$29.99 a roll will sale 9 unopened rolls, \$99. 482-8410.

Kenmore heavy duty washer, 4 cycle, 6 temperature settings, fully adjustable water level, \$75, can deliver. 482-3428.

Basset babybed solid oak, ex cond, \$75; small white baby crib that rocks, \$50; 2 car seats, \$5 ea; full size refrigerator, \$50; dining room set w/4chairs, \$15; entertainment center, \$25. Kay, x33621.

Television cart on wheels, \$15; microwave or TV cart on wheels, \$15; small mahogany end table, 2 drawers, \$15; desk, 3 drawers, 18" wide x 45.5" long, \$40. 488-5564.

Gold leaf framed mirror, nice, 27" x 36", \$85; 4 cushioned office chairs, like new, \$25 ea; other office furniture; love seat couch, 2 cushion, ex cond, new \$750 sell \$250. 488-5564.

Maytag W/D, large capacity, ex cond, \$650. x32686.

Full size waterbed, frame & mattress, \$175 obo; full size bed, headboard, frame, mattress,

box springs, \$75 obo. Andy, 335-6049.

Solid wood loft bed w/built-in bookcase, desk & dresser, \$475. x32579.

### Wanted

Want In-line skates, with or without pads & gloves, women's size 9 or 9.5, Bauer, California Pro or similar brand, good cond. 866-4083.

Want carpool. x33027.

Want personnel to join VPSI vanpool departing Meyerland Park & Ride at 7:05 am for JSC. Van pool consist of on-site personnel working 8 am/4:30 pm shift. Don Pipkins, x35346.

Want empty glass baby food jars, sz #1 & #2 for crafts, need lots, no lids needed. Linda, x40077.

Want STS-69 & STS-73 payload & experiment cloth patches & decals, STS-69, WSF, IEH-1, UVSTAR, SEH, GLO & CAPL-2; STS-73/USML-2, STDCE, CGF, DPM, CFFC, CGBA, SAMS, 3DMA, APCF, STABLE & Astroculture. Andrew, x34312 or 280-0647.

Want personnel to join VPSI Vanpool, departing South Braeswood Park & Ride lot, 6:50 a.m. for JSC & offsite locations, 7:30 - 4:30 shift. Susan Gaynor, 282-5447 or Al Ruder, x34997.

Want low priced pickup, prefer Toyota, Nissan, or Mazda, also want school/work car. 271-7011.

### Miscellaneous

Off-white wedding dress, very ornate & unique, mermaid style sz 7, \$850 + veil. 482-8410.

Fisher 24 CD changer, \$115; 2 15" all terrain truck tires, \$70; 2 audio concepts speakers, \$55. Chris, 334-6898.

Day-Timers Planner, leather, zipper notebook, full 8.5 x 11 size, desk paper punch, \$30; 14k diamond cut rope bracelet, 2.5mm wide, 7" long. \$50. Eric, x31917.

Small microwave, works great, \$50; large wood glider, 2 separate seats, \$250; large burgundy rug, \$35; burgundy throw, \$101 burgundy pillows, \$5 ea; cement yard statues; wedding dress, beautiful, white, short sleeved, w/petticoat, veil, sz 3/5, \$200. 882-0405.

Day bed, white metal, w/mattress, sheets, white comforter, shams, ex cond, \$150; Kolcraft baby stroller, lt blue, \$40; Kolcraft playpen, \$35; Fisher Price walker, \$23; Cosco infant car seat, \$20; Playskool Fold-in-Go active quilt, \$8; baby play gym, \$8. x49691

Playskool Fold-in-Go Busy Floor gym, \$8; Kolcraft Rock-N-Ride infant car seat & carrier, \$25; Fisher Price Carrier sleeping play pen, \$40; Kolcraft car seat, grey, \$40; automatic Century swing, \$50; toddler toys, \$3 & up; toddler boy cloths, sizes 2 & 3T, \$3 & up. x49691.

Hummer Collector Xmas plates, '17 - '84, plus '91 Avon Xmas plate, reasonable prices. Stan, 339-0327.

Peugeot 12 speed men's bicycle, 50 cm PH-10 Carbolite frame, alloy components, ex cond, \$100. 486-8266.

American Tourister Luggage/garment hanger on wheels, rarely used, new \$150 sell \$50. 486-8266.

Infant car seat/baby carrier, \$30; electric infant swing, \$30; wood table, & 4 chairs, \$75; lawn mower, \$20. x38867 or 332-7335.

Racing bike, Centurion Lemans RS, 12 speed, Sugine shifter, Dia-Compe brakes, Araya tires, electronic Odometer, \$150; x35180 or 326-3706.

Mens size 8 rollerblade Lightning skates, good condition, \$100. Dave, x33845 or 996-5075.

Childcraft Crib-n-Bed converts into toddler bed/chest of drawers, white w/pastel drawer handles, new \$800 sell \$450. 244-7951 or 486-5959.

Marlin 22 long rifle, \$90; 2 super single sleeping bags, \$25 ea; tent, 8' x 10', \$25; 2 6' x 3' tables, \$30 ea. x32264 or 488-5962.

Nordic Trac cross country ski exerciser, ex cond, \$200; 30 gal aquarium w/wood stand, external filter & aerator, ex cond, \$100. 488-5722.

Pageant dresses, toddler, girls size 12, formals, infant & toddler Martha Miniatures, baton twirling costumes, girls Dickens on the Strand costumes, ex cond. 488-6521.

Dolls, from private collection, Porcelain & vinyl, ex cond, very reasonable. 488-6521.

Montgomery Ward gas dryer, god cond, w/manuals, \$150; 5Hp tiller B&S engine, ex cond, \$175; variable transformer 0-140 VAC 10 amps, \$50; 14" McCulloch super Pro 40 chain saw, ex cond, \$50. 921-7212.

Heavy duty 5" swivel vise, ex cond, new \$140 sell, \$70; window exhaust fan, 20" blade, ex cond, 2 spd, \$30; 3 spd Squirrel cage blower on casters, ex cond, \$50; electric motors 1/4 thru 1 Hp 115V & 220V, also 3 Phase. 921-7212.

Original '68 Star Trek comics, most issues 2 - 58; other antique comics, Star Trek The Next Generation customizable card game, many rare. Justin, 482-0969.

Howa rifle, formerly Smith & Wesson 1500, bolt action, .223 cal, 22" barrel, blue, synthetic stock, rubber butt pad, ex cond, \$300. x37346.

Self propelled lawn mower, 21" cut, 4.0Hp, runs good, \$70; Free tomato cages. x38395.

Nissan pickup tailgate, ex cond, black, \$100; chrome bumper, \$75. 771-0955.

# Ellington Safety Day

## Employees at Ellington Field participate in Safety Awareness Day



By Rindy Carmichael

On Oct. 26, Ellington Field joined in historical ranks with JSC as they followed suit in a stand-down for safety.

"We first scheduled the day for Aug. 30, along with JSC, but had to postpone because of mission activities," said John Starnes, aviation safety officer of Flight Crew Operations. "After several more attempts, we finally set the day for Oct. 26, deciding we would carry on regardless of what else happened and just hope everything would go well."

What transpired that day impressed even Starnes. Chief of the Aircraft Operations Division, Bob Naughton, kicked off the day with his commitment to the event.

"It is prime time for an incident or accident to occur," Naughton said. "We've flown more flight time in the last six months than in any other six-month period—making it too easy for someone to get hurt because of being too busy. Let us grasp this day to do an analysis of ourselves before a mishap occurs—not after—to decide whether we are good because we haven't had an accident to date, or are we just lucky?"

Naughton was inspirational in setting the mood for the day. In a challenge to employees, he asked them to examine current safety practices and consider where an accident was likely to happen.

Down time is extremely critical to the Aircraft Operations Division. The employees' days events are driven by flight schedules. Committing an entire day to safety sent a signal to employees about how Bob Naughton, Dave Leesma, director of Flight Crew Operations, and DynCorp management felt about their well-being said Starnes.

"We were there to reflect on where we had been, to evaluate where we are now, and plan

where we're going and how we are going to get there safely," Starnes said. "Our intention was never to have a safety stand-down day and go back to work. We were after more than that. Our intention was to have the day and come out of it with both an attitude and a commitment that would lead us in the right direction for a long time."

Throughout the day, more than 350 employees attended chosen presentations and activities. Concurrently, each organization was given time to hold workshops or discussions on area-specific topics. The goal was to create a day that was fun, informative and beneficial.

Steve Hester of Loral Space Information Systems enabled Ellington to replay a video of the JSC Safety Awareness Day morning program over the local cable television system several times during the day. Employees were able to view the program without having to leave their work area. Other activities included a game of safety jeopardy and training in off-the-runway aircraft recovery.

The T-38 mishap exercise consisted of the actual slinging of an airplane. In an aircraft mishap, more damage could be done after the incident than by the incident. As prevention, all light airplanes can be picked up with a sling made for that particular aircraft.

"We seized this opportunity to go through the whole procedure, training employees as well as the on-site rigging contractor who provided the crane," said Starnes. A video was made and will become a part of the T-38 training program.

Hernandez Engineering, Inc. Fire Protection Specialists reviewed fire fight-

ing systems within each of the hangars and supply warehouses. They performed walk-throughs of the current system, trained employees on how it works, what triggers the system, and what happens if it goes off. For example, millions of dollars of aircraft equipment is stored in the warehouses. If a sprinkler head is inadvertently hit by a piece of cargo, employees need to know how to stop the water system before it causes extensive damage.

Other presentations were offered by Roger Zwiag, Shuttle Training Aircraft Instructor Pilot and former Chief of the Aviation Safety Office, who provided an incident history and lessons learned from STA operations in recent years; Kandy Hosea of the Flight

Operations Branch, who informed her audience on child abuse, stressing safety in the home as well as at work; Sheila Goldberg and Jody Licatino of Kelsey-Seybold taught computer ergonomics and AOD Pilot Stephanie Wells who conducted a short refresher class on cockpit resource management.

Meg Lonero, the airport senior superintendent, explained that Ellington Field is a City of Houston airport. She illustrated current support by the city, potential dangers that exist as a commercial airport, plans for the future and emergency planning procedures.

John Starnes provided information on recognizing hazards and risks within the workplace. Starnes closed his presentation with some safety food for thought, "A mishap is almost always the result of a chain of unplanned events and a series of anomalies. We usually have several opportunities to break that chain. When you go back to your

shop, work center, office, aircraft, home, or on the road, will you do your best to break it?"

After completion of workshops and presentations, employees were briefed on the results of a previously taken cultural survey and attended an awards ceremony where FOD Buster Awards and a Silver Snoopy Award were presented. FOD Buster Awards are granted to individuals who play an active roll in AOD's FOD, or foreign object damage/debris, control and elimination program.

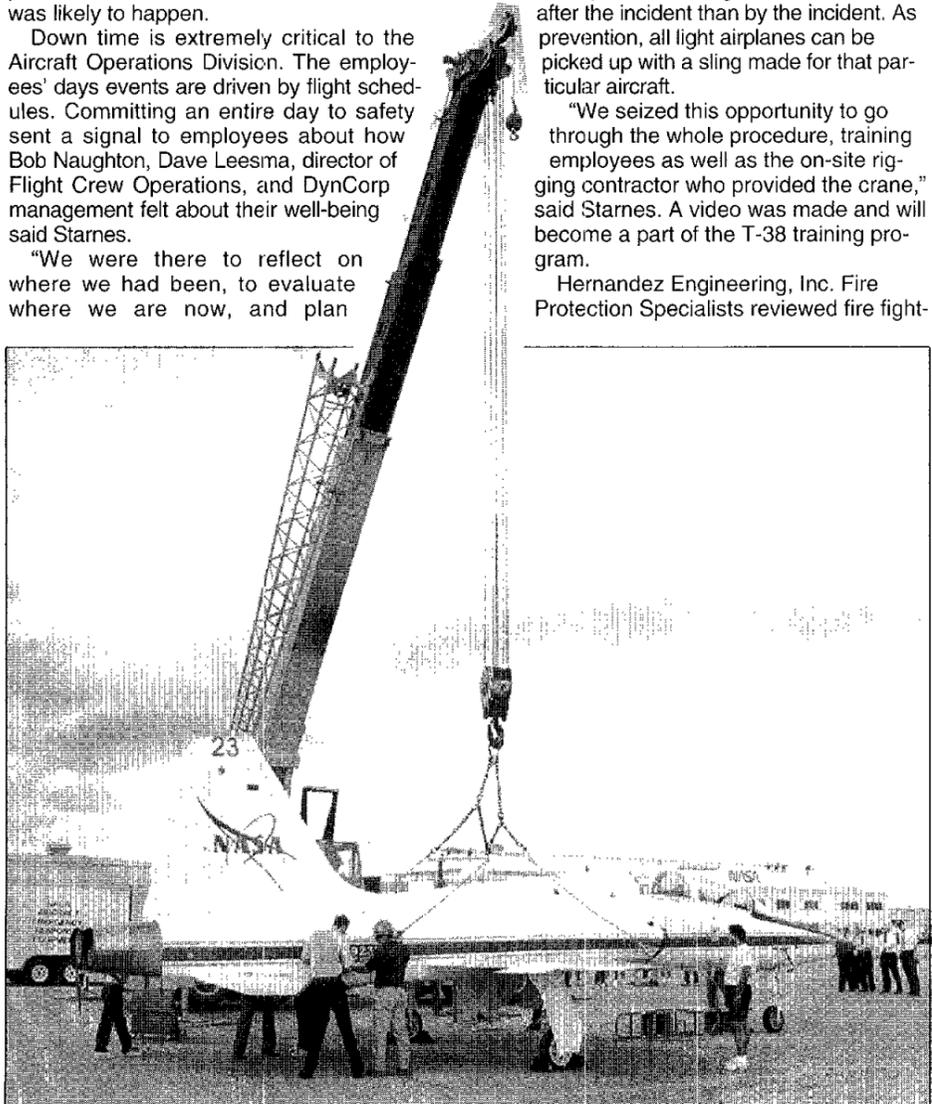
Recipients of the award were Carl Graham, Johnnie Mimms, Juan Vicencio, Lloyd Patty, Patrick Wright, Robert Wei, Mark Pebbles, Jimmy Harvard and Jose Miranda all of DynCorp; and Henry Marshall, Dennis Lofton and Michael Axline all of Aircraft Operations Division.

The Silver Snoopy Award was presented to Aircraft Mechanic Brian Rivkin by Bob Cabana, chief of the Astronaut Office for his sustained performance but, most importantly, for the discovery of a failed part in an aircraft that could have led to a serious accident.

Like JSC's Safety Awareness Day, Ellington Field's day was a milestone in history, bringing employees and contractors together as a team to share in the common goal of a safe workplace. "I was very happy with the day. It was far greater than I thought it would be, given the circumstances. Triple Nickel, chief of the Aviation Safety Office, deserves a lot of credit. There was a tremendous amount of loose ends to pull together and a flurry of activity to coordinate at the last minute. Triple did a super job," said Starnes.

Results from the day have started coming in. People have been very candid and positive on their surveys. Employee involvement and concern for their own safety has risen since that day, Starnes added.

"And isn't that the bottom line," he continued, "everyone coming to recognize they are each responsible for their own safety?" □



From top to bottom, left to right: FOD Buster Awards were presented to from left, Robert Wei, Johnnie Mimms, Lloyd Patty, Patrick Wright and Mark Pebbles, all of DynCorp; Michael Axline, Dennis Lofton and Henry Marshall, all of Aircraft Operations Division. Sandy Sloan, right, FOD officer for NASA at Ellington Field stands with the crew. Not pictured but received awards were Carl Graham, Juan Vicencio, Jimmy Harvard and Jose Miranda of DynCorp. Brian Rivkin receives a Silver Snoopy Award from Bob Cabana, chief of the Astronaut Office for his discovery of a failed part in a NASA T-38 aircraft. The T-38 aircraft mishap exercise consisted of the actual slinging of an airplane. Margaret Lonero, senior airport superintendent of Ellington Field, explains major improvements recently made at Ellington. Norman Boettcher, left, and Demetrius Roberts of Hernandez Engineering explain the operation of fire detection and fire suppression systems in Hangar 135.

JSC Photos by Benny Benavides

# New dates set for JSC health-related fitness program

Three Health-Related Fitness courses will be offered next year that can produce significant beneficial changes in exercise capacity, body weight and blood chemistry.

The Health-Related Fitness program combines education with exercise. Exercise prescriptions are designed and updated from medical examinations and periodic fitness appraisals. Medical screening must include a maximal stress test for applicants over age 39 or those under age 40 whose medical status requires additional testing. Civil servants can be examined free of charge at the JSC Clinic. Non-civil servants must get the examination off-site at their expense. The Health-

Related Fitness Staff will mail the appropriate medical examination forms to non-civil service applicants.

Three different Health-Related Fitness courses will be offered in the coming year. Health-Related Fitness Program I—a 12-week course that meets on Monday, Wednesday and Friday—will begin Jan. 8, April 1, June 24 and Sept. 16. Health-Related Fitness Program II—a 10-week course that meets on Tuesday and Thursday—will begin April 2. Health-Related Fitness Program III—also a 10-week course that meets Tuesday

and Thursday—will begin on Sept. 9.

The Nutrition Intervention program includes a blood draw for measurement of cholesterol and other constituents, followed by six weeks of nutritional education. Additional blood samples are taken 12 weeks and one year later to assess program effects. Classes meet for one hour once per week on Tuesday. Classes will begin on Jan. 9, Feb. 27, April 4, Aug. 6, Sept. 17 and Oct. 29.

The Complete Weight Control educational program has been established to combat the

serious medical risk of obesity. The 12-week course meets once per week for an hour on Tuesday and addresses the four issues of weight control including exercise, diet, medicine and behavior. Classes begin Jan. 9, April 2, June 25 and Sept. 17.

Participation in any of the programs is a non-duty activity. Civil service personnel must make appropriate arrangements with supervisors for the time involved.

Forms may be obtained by a forms coordinator or the Health Related Fitness Office and sent to mail code AW9 or can be delivered to Rm. 146 at the Gilruth Center. For more information, call x30301.



total health

## Holidays affect JSC Roundup deadlines

Because of the Thanksgiving and Christmas holidays, Space News Roundup will not be published Nov. 24 or Dec. 29.

These changes will affect some deadlines.

The deadline for Swap Shop ads and Dates and Data calendar items for the Dec. 1 issue will be Nov. 17.

Around Christmas, the deadline for Swap Shop ads to be published in the Dec. 22 Roundup will remain unchanged, 5 p.m. Dec. 15. The deadline for Dates and Data items for that issue also will be 5 p.m. Dec. 15.

The deadline for Swap Shop ads for the Jan. 5 issue will be 5 p.m. Dec. 22. The deadline for Dates and Data items for that issue will be 5 p.m. Dec. 27.

All ads and calendar items will be published on a space-available basis, first come, first-served. Any ads that cannot be published will be discarded and the requesting employee will need to re-submit a completed JSC Form 1452 to have the ad printed in a later issue.

## STS-74 to be last '95 flight

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Given a launch tomorrow, *Atlantis* is scheduled to land at 12:28 p.m. Nov. 19 at KSC, completing the 1995 schedule of shuttle flights.

*Columbia*, meanwhile, was moved to KSC's Bay 2 processing hangar Sunday afternoon, where it has been undergoing post-flight inspections. Damage to the orbiter's thermal tiles was classed as average following its 16-day mission, the second longest shuttle flight to date, and the spacecraft appears to be in excellent condition. The next mission for *Columbia* will be the reflight of the Tethered Satellite System, planned for a late February 1996 launch. The first flight of 1996 is planned for *Endeavour* on STS-72, a mission that will retrieve the Japanese Space Flyer Unit long-duration satellite and deploy and retrieve the Office of Aeronautics and Space Technology free-flyer experiment.

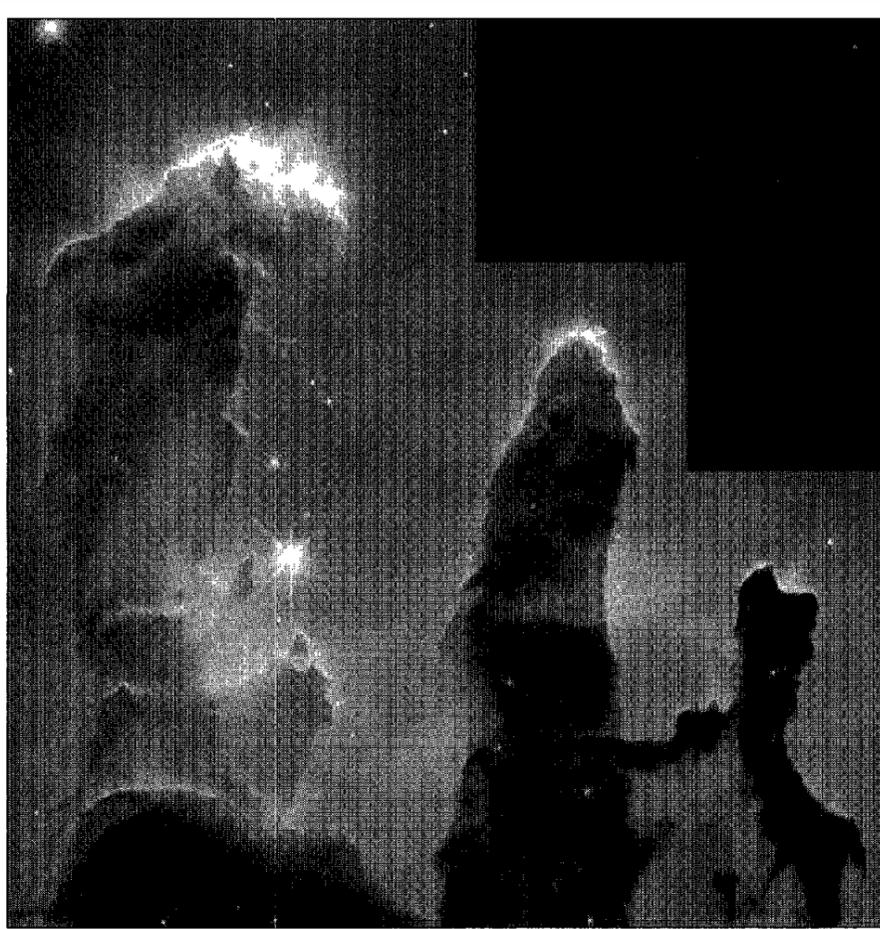
## Travel facts on Internet

(Continued from Page 1)

improve the efficiency of the Travel Funding Office."

Also, all travelers should be aware that the per diem rates are available on the Internet. The URL addresses are: Continental U. S. rates: <http://www.fss.gsa.gov/perdiem.html>; Outside the Continental U. S. (example: Hawaii) rates: <ftp://ftp.hq.nasa.gov/pub/travel.rates/non-foren.txt>; Foreign rates: <ftp://ftp.hq.nasa.gov/pub/travel.rates/foreign.txt>

Over the next few months, these new services will be coordinated through the administrative officers and travel coordinators in the various organizations.



Undersea corral? Enchanted castles? Space serpents? These eerie, dark pillar-like structures are actually columns of cool interstellar hydrogen gas and dust that are also incubators for new stars. The pillars protrude from the interior wall of a dark molecular cloud like stalagmites from the floor of a cavern. They are part of the "Eagle Nebula" a nearby star-forming region 7,000 light-years away in the constellation Serpens.

## Embryonic stars emerge from interstellar 'eggs'

Dramatic new pictures from the Hubble Space Telescope show newborn stars emerging from dense, compact pockets of interstellar gas called evaporating gaseous globules, or EGGs.

Hubble found the "EGGs," appropriately enough, in the Eagle nebula, a nearby star-forming region 7,000 light-years away in the constellation Serpens.

"For a long time astronomers have speculated about what processes control the sizes of stars—about why stars are the sizes that they are," says Jeff Hester of Arizona State University. "Now we seem to be watching at least one such process at work right in front of our eyes."

Pictures taken by Hester and co-investigators resolve the EGGs at the tip of finger-like features protruding from monstrous columns of cold gas in the Eagle nebula. The columns—dubbed "elephant trunks"—protrude from the wall of a vast cloud of molecular hydrogen, like stalagmites rising above the floor of a cavern. Inside the gaseous towers, which are light-years long, the interstellar gas is dense enough to collapse under its own weight, forming young stars that continue to grow as they accumulate more and more mass from their surroundings.

Hubble gives a clear look at what happens as a torrent of ultraviolet light from nearby young, hot stars heats the gas along the surface of the pillars, "boiling it away" into interstellar space—a process called "photoevaporation." The Hubble pictures show photoevaporating gas as ghostly streamers flowing away from the columns. But not all of the gas boils off at the same rate. The EGGs, which are denser than their surroundings, are left behind after the gas around them is gone.

"It's a bit like a wind storm in the desert,"

said Hester. "As the wind blows away the lighter sand, heavier rocks buried in the sand are uncovered. But in M16, instead of rocks, the ultraviolet light is uncovering the denser egg-like globules of gas that surround stars that were forming inside the gigantic gas columns."

Some EGGs appear as nothing but tiny bumps on the surface of the columns. Others have been uncovered more completely, and now resemble "fingers" of gas protruding from the larger cloud. Some EGGs have pinched off completely from the larger column from which they emerged, and now look like teardrops in space.

By stringing together these pictures of EGGs caught at different stages of being uncovered, Hester and his colleagues are getting an unprecedented look at how stars and their surroundings appear before they are truly stars.

"This is the first time that we have actually seen the process of forming stars being uncovered by photoevaporation," Hester emphasized. "In some ways it seems more like archaeology than astronomy. The ultraviolet light from nearby stars does the digging for us, and we study what is unearthed."

"In a few cases we can see the stars in the EGGs directly in the images," says Hester. "As soon as the star in an EGG is exposed, the object looks something like an ice cream cone, with a newly uncovered star playing the role of the cherry on top."

Ultimately, photoevaporation inhibits the further growth of the embryonic stars by dispersing the cloud of gas they were "feeding" from. "We believe that the stars in M16 were continuing to grow as more and more gas fell onto them, right up until the moment that they were cut off from that surrounding material by photoevaporation," said Hester.

## Christmas dance tickets on sale

Better not cry, better not pout, tickets to the Employee Activities Association annual Christmas Dinner/Dances are out. They are on sale in the Bldg. 11 cafeteria.

This year, two different bands will perform in two different rooms at the Gilruth Center.

On Dec. 9, the "Aubrey Tucker Orchestra" will play big band, swing and easy listening in the ballroom, and "4th Wave Rhythm" will play a music variety from tango to country & western in the gym.

Social begins at 7:30 p.m. and a dinner of prime rib will be served at 8 p.m. Tickets cost \$22.50 per person. Ticket sales close at 1 p.m. Dec. 6. For additional information contact Mavis Ikenhans at x49644.

## Little progress to Federal budget

There has been little progress in the past week in the federal budget process.

A small number of appropriations bills have been passed in final form by Congress, and only two were recently signed by the President. The NASA appropriations bill has not yet been passed by Congress. The Appropriations conference which considers the NASA budget met last week to iron out the differences between the House and Senate versions. Once the bill is reconciled, it will go back to both the House and Senate for a vote, and then on to the White House where a veto is a possibility.

Meanwhile, the continuing resolution which has provided funding for government operations since the beginning of the fiscal year expires Monday. While an extension is generally expected, more restrictive funding levels are anticipated. The new continuing resolution may restrict budget authority as much as 30 percent less than the current resolution. As in the past, passage of a continuing resolution will likely occur at the eleventh hour. The center will continue to inform employees about budget issues as the process continues.

## Crew collects more data than expected during flight

(Continued from Page 1)

of contingency time built into the schedule for things to break, but nothing broke so I think we collected a lot more data than we had ever anticipated."

Sacco was anxious to get home and study results of the crystal growths he worked on during the flight.

"It was a dream come true for me," Sacco said. "People said I would remember the flight and I will, but it's the people down here, their dedication, their vision and their ability to work long hours that I really appreciate. I am very anxious to get home and analyze the zeolite crystals. We have some very nice looking crystals."

Rominger praised the veterans on the flight for making things run smoothly during the 16 days in orbit.

"I had high expectations and it exceeded it in every way," Rominger said. "It was a fantastic team we had on board. Our veterans set the personality of the mission and it was an incredibly well-oiled machine."

## Goldin sets goals for new shuttle prime contractor

(Continued from Page 1)

competitive contract by September 1996.

• Both parties must agree on a statement of work which adequately describes what the space flight operations contractor must do in performance terms. "We will tell them what we want in terms of outcome, but we will not dictate the steps to get there," Goldin said.

• U.S. Alliance must prepare technical and cost proposals. These proposals must contain specific plans to reduce requirements, facilities and workforce.

• NASA will evaluate these proposals and use them to develop an agreed-upon contractual document that incorporates all of U.S. Alliance's obligations and provides incentives to ensure the contractor maintains safety, meets the flight manifest and achieves efficiencies.

• The parties must develop a phased contractual arrangement that commits U.S. Alliance to an initial effort to identify program efficiencies and provide clear milestones to reach a final, definitive agreement.